



Pádraig Fleming

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The Gas Network plays a critical role in island of Ireland's Energy System today





+713,000 Customers connected



Future proofed
One of most modern
networks in Europe



Flexible
A secure, instantly
available energy
source which has
made renewable
deployment possible



14,725km of gas pipeline could wrap around Ireland's coastline 4 times



Proven ability to meet demand in harshest weather conditions, ensuring security of supply

Resilient network



DiversitySupplying energy for power generation, heat and transport



Crucial part of integrated energy system to achieve net zero



— Natural gas pipeline

— Hydrogen pipeline

Biomethane pipeline

···· Hydrogen pipelines under construction

O Hydrogen cluster

Biomethane central grid injection point

Direct biomethane and hydrogen connections not included

Foundation Now and 202

Now – end 2027

Development 2028 – 2032

Repositioning 2033 - 2040

Phase 1

2033 - 2036









Phase 2 2037 - 2040

Net zero carbon network by 2045

Conversion 2041 – 2045



By end-2027 By end-2032 By end-2036 By end-2040 By end-2045



Biomethane production and anaerobic digestion

Biomethane in facts and figures



Rural Development

- €1.6Bn investment (Davy Report; Shaping a Net-Zero Future)
- Over 3,000 jobs including the diversification and stimulation of the rural economy*

First injection facility

- Green Generation Ltd. in 2020 90GWh/p.a
- ≈ 30MW Wind Farm

Direct Connection

- July 2024 1st Plant contracted
- 4 more contracted since
- 5 additional offers issued
- 6 pending quotation

Green Generation in Cush, Co. Kildare



Typical Larger EU Site



^{*} Renewable Gas Forum Ireland, An Integrated Business Case for Biomethane in Ireland 2019

Development of scale at pace is possible with the right incentives Denmark Case study





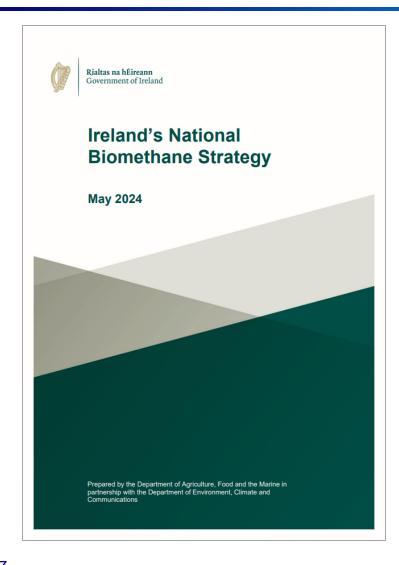
Gas 8 years

20151% Gas consumption from Biomethane

2023 38% Gas consumption from Biomethane

New Developments - National Biomethane Strategy





- The National Biomethane Strategy is a significant milestone for the industry, we welcome its publication.
- The development of a new agri-centric biomethane industry can deliver cross sectoral benefits for Ireland:
 - Without biomethane, Ireland is unlikely to meet its legally binding climate targets
 - Biomethane helps reduce agriculture sector emissions
 - Diversification option for farmers
 - Opportunity to replace chemical fertiliser with a supply of biobased fertilizer
 - Helps reduce Ireland's energy emissions
 - Improve biodiversity and water quality
 - Improves gas security and diversification of supply
 - Stimulation of the rural economy
 - Supports decarbonization of businesses where electrification is challenging

Strategy is considered the first key step in delivering Government's target of 5.7 TWh of indigenously produced biomethane by 2030. **However operational supports are needed.**

Snapshot of Biomethane supply

National potential in rural areas to drive development in these areas.

County	GWh	County	GWh
Carlow	40	Louth	80
Cavan	2,791	Mayo	287
Clare	85	Meath	392
Cork	1,442	Monaghan	1,068
Donegal	550	Northern Ireland	166
Dublin	356	Offaly	85
Galway	336	Roscommon	90
Kerry	116	Sligo	80
Kildare	2,527	Tipperary	735
Kilkenny	70	Waterford	120
Laois	268	Westmeath	559
Leitrim	0	Leitrim	0
Limerick	2,118	Wexford	394
Longford	18	Wicklow	45
Grand total			14,818

Annual Capacity in GWh per annum



Typical AD Plant - from Biomethane Energy Report

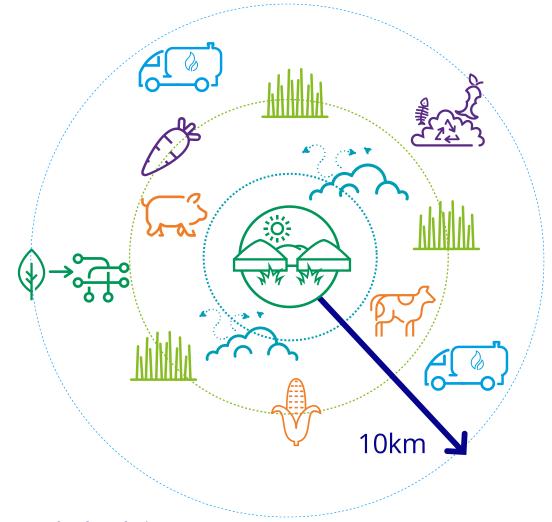


40GWh – 5km from network

Land requirement of 890 hectares dedicated to feedstock delivering (2.8% in 10km radius)

Need to consider implications for gas network configuration





Ref. KPMG Grassland Analysis - Nov 2018

Biomethane getting to market





Direct Pipeline



Central Grid Injection

- Connection Policy
 developed and approved –
 30% contribution, subject to
 economic test
- Changed gas spec.
- Standard Connection Design
- Standard Reverse
 Compression Design
- Construction of 700GWh
 Central Grid Injection facility
 in Mitchelstown
- Some outstanding policy issues

Gas Networks Ireland - Actions





Developed and implemented Renewable gas certification system to issue and track "Green Certs"



Working with regulator to further develop policy in line with National Biomethane Strategy



Procurement of
Biomethane for
Shrinkage (own use gas)
at exploration stage



Questions